

MAR 01 1999

ECOLAB Inc.
 370 N. Wabasha Street
 St. Paul, MN 55102

ATTENTION: Ann M. Oxford

SUBJECT: Ster-Bac
 EPA Registration Number 1677-43
 Your Amendment Dated: November 24, 1998

This is to acknowledge receipt of your amendment to include a storage and disposal statement for reusable containers and add directions for use for the above referenced product. This amendment is acceptable subject to the comments listed below.

- 1) Revise the "Statement of Practical Treatment" by changing the "If On Skin" statement to read as follows "Wash with plenty of soap and water. Get medical attention." The statement "if irritation persists" must be deleted.

- 2) On page one of the label the phrase "For Industrial Use Only" must be changed to read as follows "For Institutional and Commercial Use Only." This statement may be modified to state "For Institutional Use Only" when this product is being marketed specifically to institutions. The following sites on your label qualify as institutions: hospitals, nursing homes, and schools. When this product includes the phrase "For Institutional Use Only" the directions for other sites such as restaurants (which are commercial) must not be included on the label. The Agency will allow the phrase "For Commercial Use Only" when this product is marketed to restaurants, food services, barber and beauty shops along with dairies, beverage and food processing plants. When marketed specifically to commercial sites the directions for other types of sites must not be included on the label.

CONCURRENCES

SYMBOL	7510C							
SURNAME	S. Jantz							
DATE	2/26/99							

- 3) In the fifth section of page two which begins with the phrase "Fogging can be used..." revise the sentence which begins "All food contact surface must be thoroughly rinsed with a Ster-Bac..." to read as follows "All food contact surface must be *sanitized* with a Ster-Bac..."
- 4) On page three in the section which begins "Ster-Bac fulfills the criteria of Appendix..." revise the phrase "...U.S. Public Health Science..." to read "...U.S. Public Health *Service*..."

We have reviewed your file and based on your submission of 12/7/90 which included a recommendation from the St. Paul Ramsey Medical Center we will allow the "If Swallowed" statement to read as follows "Rinse mouth at once; then drink one or two glasses of water. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. CALL A POISON CONTROL CENTER OR PHYSICIAN IMMEDIATELY."

The additional information provided in your letter of 11/24/98 has been carefully considered. This information has provided us with further rationale for various issues which were addressed in the Agency letter of 10/22/98. At this time we agree with your rationale for the other issues which are not specifically mentioned in this letter.

A stamped copy of the label has been included for your files. Please submit one copy of the final printed label. Should you have any questions concerning this letter, please contact Tracy Lantz at (703) 308-6415.

Sincerely,



Velma Noble
 Product Manager (31)
 Regulatory Management Branch I
 Antimicrobials Division (7510C)

Enclosure
 7510C:T. Lantz:2/23/99:1677-43c

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

3/7

STER-BAC

QUATERNARY AMMONIUM SANITIZER - DISINFECTANT - DEODORIZER

ACTIVE INGREDIENT:
n-Alkyl (50% C14, 40% C12, 10% C16) dimethyl benzyl ammonium chloride 10.0%
INERT INGREDIENTS: 90.0%
TOTAL 100.0%

KEEP OUT OF REACH OF CHILDREN
DANGER

PRECAUTIONARY STATEMENTS - HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: Corrosive. Causes irreversible eye damage and skin burns. Do not get in eyes, on skin or on clothing. Wear rubber gloves, chemical goggles, and protective clothing when handling. Harmful if swallowed. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Flush immediately with cool water. Remove contact lenses. Continue flushing for 15 minutes, holding eyelids apart. Get prompt medical attention.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention ~~if irritation persists.~~

IF SWALLOWED: Rinse mouth at once; then drink one or two glasses of water. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person.

**CALL A POISON CONTROL CENTER OR PHYSICIAN IMMEDIATELY
FOR EMERGENCY MEDICAL INFORMATION, CALL TOLL-FREE 1-800-328-0026**

~~FOR INDUSTRIAL USE ONLY~~ Institutional and Commercial Use Only

DO NOT MIX WITH ANYTHING BUT WATER

Net Contents: 1 gallon (3.78 l)
2.5 gallon (9.45 l)
5 gallons (18.9 l)
55 gallons (208.8 l)
350 gallon tote

ACCEPTED
with COMMENTS
in EPA Letter Dated:

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Under the Federal Insecticide,
Fungicide and Rodenticide Act as
amended for the pesticide,
registered under EPA Reg. No.

1677-43

EPA Reg. No. 1677-43
EPA Est. 1677-IL-2 (J), 1677-NJ-1 (W), 1677-TX-1 (G), 1677-GA-1 (M), 1677-CA-2 (R)
1677-MN-1 (P), 1677-CA-1 (S), 1677-PR-1 (D), 1677-MN-1 (P), 1677-OH-1 (H)
1677-NC-1 (N), 1677-MO-1 (K)

The superscript refers to the first letter of the date code.

Ecolab Inc.
370 N. Wabasha Street
St. Paul, MN 55102

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**INSTITUTIONS - HOSPITALS - NURSING HOMES - SCHOOLS - RESTAURANTS -
FOOD SERVICES - DAIRIES - BEVERAGE AND FOOD PROCESSING PLANTS**

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in manner inconsistent with its labeling.

DEODORIZING - After cleaning, deodorize waste containers and inaccessible areas in food processing plants with 1 oz Ster-Bac to 1 gl of water (800 ppm). Flush surfaces thoroughly or apply by mopping or sponging onto the surface.

DISINFECTING - Disinfect previously cleaned hard nonporous surfaces such as walls, floors, woodwork, sinks, bathroom fixtures, with 1 oz Ster-Bac to 2 gl of water (400 ppm). For disinfecting previously cleaned porous surfaces such as ceiling board, chopping blocks, pallets, rubber conveyor belts, in meat, poultry and other food processing operations, use 1 oz Ster-Bac to 1 gl (800 ppm). Flush surfaces thoroughly or apply by mopping, sponging or coarse spraying on surface. All surfaces should be exposed to the disinfecting solution for a period of not less than 10 minutes. Food contact surfaces that have been disinfected must be rinsed thoroughly with potable water.

For use on non-food contact surfaces as a general disinfectant in the brewery industry, use 400 to 800 ppm active quaternary. Follow disinfectant directions above.

Fogging can be used as an adjunct to acceptable manual cleaning and disinfecting as described above. Prior to fogging, food products and packaging material must be removed from the room or carefully protected. After cleaning, fog desired areas using one quart per 1000 cu. Ft. of room area with a Ster-Bac solution containing 1.5 oz of product to 1 gallon (1200 ppm). Vacate the area of all personnel for a minimum of 2 hours after fogging. All food contact surfaces must be ~~thoroughly rinsed~~ with a Ster-Bac solution of 200 ppm active quaternary (1/2 oz per 2 gl) prior to reuse. Allow food contact surfaces to drain thoroughly before operations are resumed.

↑
Sanitized

DISINFECTING - POTATO STORAGE AREA AND EQUIPMENT - Remove all potatoes prior to disinfection of potato storage area or equipment. Preclean hard surfaces by removing heavy soil or gross filth. Follow general disinfection (1 oz per g gl) procedures as outlined above. All treated surfaces must be thoroughly rinsed with potable water prior to reuse.

DISINFECTION OF BARBER AND BEAUTY SHOP INSTRUMENTS AND TOOLS - Thoroughly preclean. Completely immerse brushes, combs, scissors, clipper blades, razors, tweezers, manicure and other shop tools for 10 minutes (or as required by local authorities). Fresh solution should be prepared daily, or more often if the solution becomes diluted or soiled. After disinfection, wipe dry the product as appropriate. NOTE: Plastics may remain immersed until ready to use. Stainless steel shears and instruments must be removed after 10 minutes, rinsed, dried and kept in a clean noncontaminated receptacle. Prolonged soaking may cause damage to metal instruments.

GENERAL DISINFECTANT - NON-FOOD CONTACT SURFACES

Pre-clean surfaces. Disinfect non-food contact surfaces such as waterproof work boots, tools, forklifts, and hand trucks with 1 oz. Ster-Bac diluted in 1 to 2 gal. water (400 - 800 ppm active quaternary). Apply by dipping, coarse spray or foam on surface. All surfaces should be exposed to the disinfecting solution for a period of not less than 10 minutes.

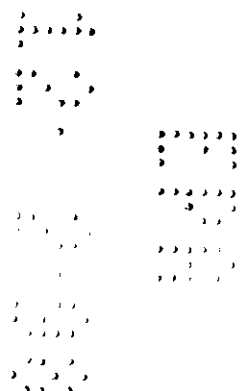
SELF-SANITIZING COATING AND SPRAY DISINFECTION (insert from attached)

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SANITIZING EQUIPMENT - FOOD PROCESSING PLANTS - RESTAURANTS - For sanitization of equipment in food processing plants, restaurants, remove gross food particles and excess soil by a pre-flush or pre-scrape, wash with a good detergent or compatible cleaner, rinse equipment thoroughly with clear water, then rinse equipment with a sanitizing solution of 1 oz product to 4 gallons of water (200 ppm). All surfaces should be exposed to the sanitizing solution for a period of not less than 1 minute. Allow equipment to drain thoroughly and air dry.

ELEVATED TEMPERATURE SANITIZING - For sanitization of equipment in food processing plants, restaurants, remove gross food particles and excess soil by a pre-flush or pre-scrape, wash with a good detergent or compatible cleaner, rinse equipment thoroughly with clear water, then rinse equipment with a sanitizing solution. At a temperature of 120 deg F, this product is an effective sanitizer for food contact surfaces at 1 ounce product to 10 gallons of water. All surfaces should be exposed to the sanitizing solution for a period of not less than 1 minute. Allow equipment to drain thoroughly.

SANITIZING EATING AND DRINKING UTENSILS

1. Scrape and preflush utensils to remove excess soil.
2. Wash with good detergent or compatible cleaner (see your Ecolab representative for a recommendation).
3. Rinse with clear water.
4. Sanitize in a solution of 1/2 oz product to 2 gallons of water (200 ppm). (Alternate directions: Sanitize in a solution of 1 oz product to 4 gallons of water.) Immerse all utensils for at least one minute. Use 2 minutes exposure time if required by governing sanitary code.
5. Drain and air dry.

NOTE: FOR MECHANICAL OPERATIONS prepared use solution may not be reused for sanitizing but may be reused for other purposes such as cleaning. FOR MANUAL OPERATIONS fresh sanitizing solution should be prepared as soon as they become diluted or soiled.

Ster-Bac fulfills the criteria of Appendix F of the Grade "A" Pasteurized Milk Ordinance 1978. Recommendation of the U.S. Public Health Service in water up to 500 ppm of hardness calculated as CaCO3 when tested by the A.O.A.C Germicidal and Detergent Sanitizer Official Method.

Service

FOR CONTINUOUS TREATMENT OF MEAT AND POULTRY OR FRUIT AND VEGETABLE

CONVEYORS - Remove gross food particles and excess soil by a pre-flush or pre-scrape, wash with a good detergent or compatible cleaner, rinse equipment thoroughly with clear water, then rinse equipment with a sanitizing solution. During processing, apply Ster-Bac at a 200 ppm quat level to conveyors with MIKRO MAGSTER or other suitable feeding equipment. Controlled volumes of sanitizer are applied to return portion of conveyor through nozzles so located as to permit maximum drainage of sanitizer from equipment and to prevent puddles on top of belt. During interruptions in operation, coarse spray equipment, peelers, collators, slicers and saws with MIKRO MASTER dispensed Ster-Bac solution of 200 ppm quat. Conveyor equipment should be free of product when applying this coarse spray.

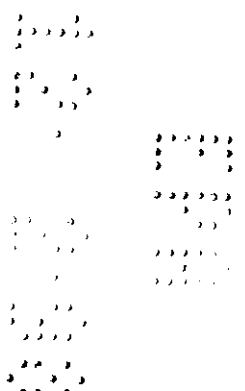
SANITIZING SHELL EGGS INTENDED FOR FOOD - To sanitize previously cleaned food-grade eggs in shell egg and egg product processing plants, spray with a solution of 1 oz product in 4 gl of warm water (200 ppm quat). The solution should be warmer than the eggs, but not to exceed 130°F. Wet eggs thoroughly and allow to drain. Eggs sanitized with this product shall be subjected to a potable water rinse only if they are broken immediately for use in the manufacture of egg products. Eggs should be reasonably dry before casing or breaking. The solution should not be reused for sanitizing eggs.

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6/7

STORAGE & DISPOSAL

DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL

STORAGE: Store this product in a cool, dry area, away from direct sunlight and heat.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: (1 gal) Do not reuse empty containers. Wrap container and put in trash. (5, 55 gal plastic) Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(2.5 gal bladder in box) Remove empty bladder from outer corrugated box. Triple rinse bladder (or equivalent). Offer box and bladder for recycling or dispose of in a sanitary landfill or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(Totes) Verify that the tote is empty. Do not rinse or clean. Seal tote and contact Ecolab for return.

(Reusable container statement) Container can be reused once the container is empty. Empty container of concentrate into dilution dispenser [specific equipment such as "Simplex dispenser" can be named to replace "dilution dispenser".] Dispenser will automatically dilute a sanitizer [or disinfectant] solution.

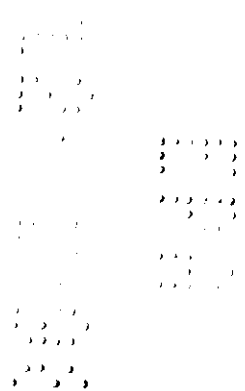
Remove concentrate label. Refill container with use dilution of concentrate from the dispenser. Replace cap with spray nozzle provided. Place correct use dilution label on the spray bottle.

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7/7

Ster-Bac Label Modification – Under Directions for Use.

SELF-SANITIZING COATING AND SPRAY DISINFECTION

Surfaces must be free of dust, soil and greases. Clean with an appropriate detergent and rinse with water prior to application if necessary.

Use a high quality spray system equipped with a mixing spray gun. The Ecolab Food and Beverage representative will make equipment recommendations. Wear appropriate protective equipment to minimize inhalation and eye/skin contact.

Fill one reservoir with undiluted **Ster-Bac**. Fill the other reservoir with undiluted **KX-6033**. Connect the reservoirs to the spray equipment and purge all air from the spray lines. Calibrate the spray equipment to deliver equal volumes of **KX-6033** and of **Ster-Bac**. Adjust to a fine mist. Use overlapping strokes to coat the entire surface to be treated.

Typical coverage is 4,000-5,000 square feet per gallon of **Ster-Bac**.

SPRAY DISINFECTING – Disinfect previously cleaned hard non-porous surfaces following general application procedures described above. Product must remain in contact with surface for 10 minutes. Allow coating to dry.

RESIDUAL SELF-SANITIZING – After the product has been applied to non-food contact surfaces as described above and the coating allowed to dry, the surfaces can be sanitized by wetting with a spray of cool water. The surface must remain moist for 5 minutes. Duration of residual self-sanitizing is dependent upon surface exposure conditions. Avoid manual scrubbing or abrasion of the coated surfaces and acidic cleaning products since these will remove the coating. For continuous self-sanitizing activity, reapply within 60 days.

REMOVAL – Coatings can be removed from surfaces with mildly acidic detergents such as **AC-3** (supplemented with **Klenz-Foam**) or **Foam-Shine**. Manual scrubbing and abrasion will also result in the removal of the coating.

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